

WHAT IS CLAIMED IS:

1.A quick-release socket adapter for T-shape socket wrench comprising:

a slide rod;

5 a slide head slidably mounted on the slide rod, at a connecting portion of the slide head a cone-shape hole defined in a radial direction of the slide head for reception of a ball, so as to enable the ball partially protrude out of the connecting portion, the ball can be actuated to make the connecting portion connect with a socket;

10 wherein the slide head is axially defined with a step hole for reception of a spring and a crown rod in turn, at an end of the slide head a head is defined and the slide head is formed with a notch, by such arrangements, when the head of the crown rod is not pushed by the slide rod, the ball falls into the notch of the crown rod since the notch of the
15 crown face the cone-shape hole, such that the ball rolls back into the connecting portion, so as to achieve a disengagement of the socket from the connecting portion, and vice versa, when the head of the crown rod is pushed by slide rod, the crown rod can push the ball to make it partially protrude out of the connecting portion, so as to achieve an engagement of
20 the socket in the connecting portion.

2. The quick-release socket adapter for T-shape socket wrench as claimed in claim 1, wherein the crown rod is provided with a C-shape ring which is used to prevent disengagement of the crown rod from the

slide head under the influence of the spring.

3. The quick-release socket adapter for T-shape socket wrench as claimed in claim 1, wherein an engaging portion is defined at a position adjacent to both ends of the slide rod, on the slide rod is defined
5 with a recess, when the head of the crown rod is pushed by the spring to move into the recess of the slide rod, the ball will fall into the notch of the crown rod since the notch of the crown rod face the cone-shape hole, such that the ball rolls back into the connecting portion, so as to achieve a disengagement of the socket from the connecting portion, and vice
10 versa, when the head of the crown rod doesn't enter into the recess of the slide rod, the crown rod can push the ball to make it partially protrude out of the connecting portion, so as to achieve an engagement of the socket in the connecting portion.

4. The quick-release socket adapter for T-shape socket wrench
15 as claimed in claim 3, wherein the recess of the slide rod is defined at a position adjacent to the engaging portion in order not to affect structural strength of the slide rod.

5. The quick-release socket adapter for T-shape socket wrench as claimed in claims 3 or 4, wherein the recess of the slide rod is located
20 opposite to the engaging portion.

6. The quick-release socket adapter for T-shape socket wrench as claimed in claims 3 or 4, wherein an identification groove is defined and located opposite to the recess of the slide rod.